



AMERICAN RAILROAD JOURNAL, AND ADVOCATE OF INTERNAL IMPROVEMENTS.

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PROPRIETORS.]

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AMERICAN RAILROAD JOURNAL:

NEW-YORK, FEBRUARY 13, 1836.

S. D. is again cordially greeted by us, and we hope he will not again permit other avocations to interfere for so long a period with his favors to the Journal.

We give the following communication an early insertion, believing fully with S. D.—and we are confident that Mr. Seymour entertains similar opinions—that in all practical cases, *short curves and steep grades* should be avoided. Yet we are sure that neither the gentlemen managing the Baltimore and Ohio Railroad, nor Mr. Seymour intended to be understood that they deemed such inclinations and curves as unobjectionable. We have always understood the former gentleman to exultate themselves and the community, when they may, that they have been able to overcome with such facility, and in so short a period, the *very great* obstacles in the shape of *steep grades and short curves*, with which they had to contend. And Mr. Seymour only congratulated the Company on their prospects of success, when he discovered that the difficulties with which they had to contend were far less than those *already overcome* by the great pioneers of the Railroad System in this country—not that they had not serious obstacles to overcome, but that those obstacles were so much less than was by some supposed.

To the Editor of the Railroad Journal:

Sir.—In locating a Railroad, or any other mode of internal communication, the natural features of the country must, of course, govern the route. Were the surface a perfect flat, as on the prairies, and in some parts of the Southern States, a straight and level line would be, as every one will agree, the proper course; and supposing the track equal in both directions, such a line effectually finished would form the very beau ideal of a Railroad, but we rarely or never meet with such a happy predisposition in nature; more frequently the outline is more

or less broken, the ground undulating in valleys and ridges, having various directions, and these, as often as otherwise, in opposition to the required course. In such cases, the judgment of the engineer is exercised; first, in ascertaining which of the various modes of attaining the same point presents the fewest difficulties, or the most prominent advantages; and second, having thus fixed upon the route, (by reducing the rugged outline of the country as much as the conventional outlay admissible on such works will permit,) in conforming, as nearly as practicable, to a level straight line, these two elements being the essential and leading principles of every mode of transportation.

But a level and straight line is, as I have already said, rarely obtainable in nature. All Roads with which I am acquainted are to a certain extent, both curved and undulating. This leads me to advert to the power in use on such Roads. Locomotive engines obviously must and do carry with them a surplus power, to enable them to overcome the extreme inclinations and curvatures in all descriptions of weather. But this surplus power has its limit. On the Sutton incline of the Liverpool Railroad, two engines are used; it does not follow from this fact, that an engine could not have been made in England sufficiently large and powerful to take the train up the incline in the worst weather. There are such powerful engines in use in England on the collieries, where moderate rates of speed and the entire control of the transportation, methodical as the action of the machine itself, renders them admissible.—Such an engine might have been framed for the Sutton incline, and might have performed the entire trip, without any one but an adept understanding that a machine of double the necessary capacity was in use. This incline forming but a very small fraction of the length of road, it was better that extra power should be in readiness at this point and that on the remaining portions of the route, engines of merely the required

capacity should be employed. We are told that on the Baltimore and Ohio Railroad, engines can be made to ascend grades of 80 and 90 feet per mile. Who ever doubted it? The question returns, is this an economical application of locomotive power?—Such short grades of high inclination require undoubtedly and necessarily engines of double the capacity necessary for the general track. But admitting that, in particular cases, this should be found expedient, it is due to truth to let these be understood as defects, as exceptions to the rates of inclination, which any engineer intending an economical use of locomotives, would admit. In the letter of Mr. Seymour to the President of the Lake Erie Railroad, and also, I am sorry to say, in some of the Baltimore and Ohio reports, it is inferred, or left to be inferred, by the reader, that such inclinations are not greatly objectionable, that they are admissible in ordinary cases; in fine, it is implied, though not expressed, that the expenditures incurred on the best Railroads, to supersede the necessity of such inclinations, have been unnecessary and unjust.

In the same communication, Mr. Seymour refers particularly to the curves on the Baltimore and Ohio Railroad, and congratulates his employers that, in this respect, the Lake Erie Road will compare favorably, inasmuch as it possesses no curve of a radius less than 700 feet. One grade, he says again, has been admitted, for only a mile or a half, however, of 90 feet per mile; several there are of 60 and 80. Then we do not require to be told men use serious drawbacks, and the curves of 700 feet radius are serious drawbacks. Shall we go in search of information to excuse the deformities of the Road. If the nature of the country renders such grades absolutely necessary, they require no excuse, although they might very honorably be fairly stated to the stockholders as circumstances which will limit seriously the capacity of the Road. If they are not absolutely necessary and can be avoided, even by a more

cious route, surely every engineer will bear me out when I say that they should be considered inadmissible, inasmuch as they deteriorate very sensibly, in the section of 2 to 1, the power of the machinery, in one direction, at least, reduce the rates of travel, increase the expense of transportation to all, and diminish, in a corresponding ratio, the returns of the stockholders. The same remarks holds good in all curves of the radii mentioned by Mr. Seymour, though not to the same extent. It is, perhaps, assumed that the Lake Erie Railroad will, in any case, be so far superior to the Lake Erie Canal, as to render all such defects unimportant. In a great national Road of this description, the wisest policy and the truest economy consists in proximity to perfection as nearly as possible. Circumstances may induce private companies unwillingly to admit of certain deflections from the proper course; but that which is done by the State, and by a State so rich in itself, and towards a purpose so eminently beneficial, and so certain of a remunerating return, should be such as the community generally could copy to advantage; should be a standing example of its class, condensing all the improvements of the day, and conducted by men of acknowledged experience and success in the department in dispute.

In advertizing to the rates of curvature on the Baltimore and Ohio Road, Mr. S. states that they did not affect the speed of the engine, which was maintained at 14 miles an hour, throughout the journey, and might have been more but for the curves, I suppose. Mr. S., I trust, does not mean, by this statement, to convey the idea that an engine can run with equal speed on a curved line and on a straight. Fourteen miles an hour is but indifferent despatch on a Railroad, and unfortunately, those Railroads which Mr. S. happens to have visited are not the most prominent examples of the superiority of Railroad transportation in the United States. Twenty miles an hour now a days, is a common and safe rate on a Railroad; twenty-five very frequent; thirty and much larger rates have occurred, but I would always desire to see them considered as exceptions. Mr. S. will not, I trust, consider it impertinent on my part, to recommend his visiting various other Roads, where the perfection of this species of conveyance is more apparent than on those which he mentions, and where the grades and curvatures are correspondingly superior. The New-Castle and Frenchtown is perhaps the best on the list. The inclinations are stated not to exceed 25 feet per mile, and the curves as being of a very large radius. The rate of travel was consequently 18 miles an hour. The same on the Washington, which, however, is not detailed. On the other Roads 11, 12, 15 and 16 miles an hour are given as the usual rates. These last are not the best specimens in their way in the country: I do not say that they are the worst; from all of them there is doubtless much valuable information to be obtained; but no consolation should be drawn from their imperfections, nor should we seek to shelter under their faults, the defects, unavoidable, if you please, of another Road.

My motive in advertizing to Mr. S.'s letter at all is, of course, but a desire to see the

Lake Erie Road, both as regards route and details of routes, as perfect as circumstances will admit.

Respectfully, &c.,

S. D.

Leeds, England, January 22, 1836.
To D. K. MINOR, Editor of the Railroad Journal.

Dear Sir,—Last month I had the pleasure to address you on the subject of Railway Iron, and as a very important change had taken place since, I will give such additional information as I think may interest you.

My last letter informed you that the meeting of the Welsh iron masters at Romney, had advanced the price of No. 2 bars to £7 10s. per ton, *three months' credit*, from £7 per ton *six months' credit*, which reduction in the time of credit was equivalent to a further rise of 2½ shillings per ton. Immediately after this meeting, the demand to increasing, (persons are always more free to buy on a rising than a falling market,) iron rose to £8, and orders flowed in from all quarters, which the manufacturers were very willing to *execute at any rate*, except at prices to be determined after the adjourned meeting of the 13th inst. should take place. This meeting occurred on the appointed day, and the price agreed upon was £10 per ton, *three months' credit*, and the parties present pledged themselves *not to sell below* that rate before the 1st of March next.—

This determination has made the market regular and steady, and large transactions are now taking place at this high price.—You will recollect that on the 25th August, the price was advanced *from £5 10s. per ton, six months' credit*, and it now being £10 per ton, *three months' credit*, it appears that iron has advanced £4 12s. 6d. per ton in the short space of five months. This very great rise appears to many persons to be unreasonable, and not likely to be maintained even for a few months. I however think the iron masters are justified in demanding such prices, and that no reduction may be expected until a very considerable increase in the manufacture takes place, which cannot be accomplished soon, as the difficulty of procuring additional workmen, who cannot be had except by training up fresh hands, is insuperable.

To procure even unemployed workmen of any kind is difficult, as every one willing and able to labor, throughout the immense population of Britain, is fully employed at good wages. Never was a country in a more flourishing condition than this. Every branch of business (even including agriculture, notwithstanding the landed interest complain of the low price of corn,) prospers, and every one is (or ought to be,) contented and happy. Every where I travel, whether it be in the counties of Derby, Nottingham, Lancaster, York, where new mills for silk, cotton, woollen and linen goods, or in Warwickshire, Staffordshire, &c., I see new establishments for various branches being erected. Every where throughout the country, new factories and dwelling houses are being constructed, and they consume a vast quantity of iron. In addition to the demand for ordinary purposes, the wants for railway purposes are even greater than I anticipated, and not one respectable house, either in the midland countries or in South Wales, is willing to take orders for any considerable

amount, if a delivery be required before August or September next.

The result as regards the price of railway iron, I will relate from my own experience. On the 19th December last I put out an order for 2000 tons of rails for an American railroad company, at £9 17s 6d per ton, and wished the same house to extend it to 4000 tons, but they declined, and they had the option of accepting that quantity for three or four days; they however refused. In the mean time I made every exertion to procure other houses to take contracts at this, and even higher prices, but found a general unwillingness to come under any engagements before the adjourned meeting at Romney, should fix prices. A fortnight after the first contractor called on me, when he refused to take any more even at £1 per ton advance on the previous rate. Subsequently I have been compelled to pay a much higher rate for the balance of the contract. At this moment railway iron of No. 3 quality cannot be procured for £5 per ton advance on the price I contracted for it on the 1st August last. But I do not suppose, for the reasons mentioned above, that iron will be lower for many months, certainly not during the present year. If prices had been forced up by speculation, I should naturally expect a reaction, but this is not the case; they rest on *bona fide* consumptive demand, and there is every prospect of their continuing, as no stocks are held by any one, and the causes which produced the great change are likely to continue.

I am now on a tour through the manufacturing region, previously to my embarkation on board of the "North America," the packet of the 1st of February, for New-York, where I hope to have the pleasure to see you on my arrival.

The destruction of so considerable a portion of the commercial part of New-York creates universal sympathy throughout this country. Most sincerely do I regret this melancholy event, and trust that our government will not hesitate a moment respecting the propriety of giving such relief as will enable the enterprising citizens of New-York to rebuild their beautiful town within a short time. But whether the national government do their duty or not, I am convinced that no town in the world will so soon recover from the effects of this truly deplorable catastrophe, for no where is their such an intelligent, active and enterprising population as in the city of New-York.

I am, dear sir,
Very respectfully, yours,
GERARD RALSTON.

RAILROAD AND CANAL INTELLIGENCE.

NEW-BEDFORD AND FALL RIVER RAILROAD.—A survey of the route of this proposed road has been made by S. B. Cushing, Esq. The length of this route is 13 miles 223 rods, being but 244 rods longer than a direct line between the two places.

More than 11 miles are disposed in straight lines, the remainder curved on radii of from 8,000 to 12,000 feet.

The inclinations are moderate, except at the village of Fall River, where additional power will be required.

The estimate for single track, including engines, cars, &c., \$211,970.

NEW-YORK.

THE LONG-ISLAND RAILROAD.—The Directors have located the part of this road from Jamaica to Jericho, and authorised it to be put under contract immediately. The ceremony of breaking ground takes place **March 31.** The section from Brooklyn to Jamaica will be opened for use April 1st, with two locomotives and fourteen cars. The cheapness of the gradation throughout the whole route has been established beyond all question. Every one acquainted with Long-Island knew the fact before. In two years it is expected to be completed the whole distance to Greenport, opposite Stonington, Conn. As soon as the Jamaica portion comes into use, in a few weeks we have no doubt many merchants of New-York will take up their residence there permanently, as the twelve miles will be travelled in about half an hour from our city.—[Even Star.]

The proposed alteration in the course of the Erie Canal at Albany, making a saving of 14 or 15 miles, is highly approved throughout all the West.

The cost of the new route will not exceed that of widening the old Canal by more than \$300,000. The city of Albany offers to pay this difference, for the use of the surplus water.

KENTUCKY.

GREEN RIVER RAILROAD.—The portion of this road from Hopkinsville to the Cumberland River has been surveyed by M. A. Chinn, Esq. He mentions two routes from Hopkinsville, one terminating at Harman's Ferry, the other at Eddyville, on the Cumberland.

From Hopkinsville	distance 56½ miles,
to Harman's Ferry,	cost \$360,305
From Hopkinsville	distance 47½ miles,
to Eddyville,	cost \$296,885

ILLINOIS.

The following acts of incorporation were passed by the Legislature of Illinois during the session just closed.

To incorporate the Beardstown and Sangamon Canal Company; Bellville and Mississippi Railroad; Warsaw, Peoria and Wabash Railroad; Wabash and Mississippi Railroad; Alton, Wabash and Erie Railroad; Mount Carmel and Alton Railroad; Rushville Railroad; Wabash and Mississippi Union Railroad; Shawneetown and Alton Railroad; Pekin, Bloomington and Wabash Railroad; Mississippi, Springfield and Carrolton Railroad; Galena and Chicago Railroad; Central Branch Wabash Railroad; Waverly and Grand Prairie Railroad; Winchester, Glynville, and Jacksonville Railroad; Illinois Exporting Company; Sangamon Fire Insurance; Chicago Marine and Fire Insurance Company; Morgan County Mutual Fire Insurance; Shawneetown Insurance; Quincy Insurance; Marseilles Manufacturing Company; Chatham Manual Labor School; Franklin Manual Labor School; Alton Female Institute; Bloomington Female Seminary of Learning; McDonough College; Burn Prairie Manual Labor Semi-

nary; Franklin Institute; Chicago Hydraulic Company.

Gov. Duncan has obtained from the Illinois State Bank the promises of a sufficient sum to enable the Commissioners to commence operations on the Illinois and Michigan Canal without delay.

PENNSYLVANIA.

The Canal Commissioners have divided the Columbia and Philadelphia Railroad into two sections, to be called the Eastern and Western Sections, and have appointed the following officers to take charge of it:

JOSEPH W. PATTON, of Cumberland county, to be Superintendent of the Western Division of that Road.

ANDREW MEHAFFY, of Lancaster county, to be Superintendent of Transportation on the Western Division.

FREDERICK VOGLE, of Philadelphia city, to be Superintendent of the Eastern Division of the Road.

WILLIAM ORTLIP, of Philadelphia city, to be Superintendent of Transportation on the Eastern Division.

A report favorable to a geological survey of the State, has been made to the Legislature.

MARYLAND.

The Senate have passed the bill authorizing the Mayor and City Council of Baltimore to subscribe to the stock of the Baltimore and Ohio Railroad Company.

OHIO.

The citizens of Cleveland have sent a memorial to Congress desiring an appropriation for a breakwater and other improvements in their harbor.

The following statistics are appended:

In 1817, about 25 vessels, of very small burthen, navigated Lake Erie; in 1835, more than 275 sloops, schooners, and brigs, of large burthen, navigated this lake. In 1817, not one steamboat existed upon this Lake; in 1835, more than twenty steam-boats, of the first class, was employed on Lake Erie. The number of passengers transported therin, in 1835 has been variously computed from 300,000 to half a million.

The commercial importance of Cleveland is shown by the fact, that in 1825, the number of vessels entering the port of Cleveland, laden with cargoes, amounted to 54—aggregate tonnage, 2060. In the year 1835, 895 vessels, with cargoes, entered the port of Cleveland—the aggregate tonnage of which were 70,750. In the year 1825, one foreign vessel arrived at this port; in the year 1835, 117 foreign vessels. The number of steamboat arrivals, in 1825, was 31; in 1835, 980.

FOREIGN.

The Brussels papers tell us that the Chamber of Commerce at Valenciennes has been deliberating about the formation of the Railway from Brussels to Paris, with a view to the interest of their arrondissement, and they came to resolutions—first, to prefer the direction by St. Quentin to that by Amiens; second, to have the line of Valenciennes considered not as a branch, but as the principal line, &c.

Nuremberg, Dec. 7.

In the morning, at 9 o'clock, the Iron

Railroad was opened in the manner named in the programme, M. Binder the chief burgomaster, opened the ceremony with an address, while the Band of the Regiment of Landwehr played the National Hymn. The monumental stone was uncovered, which has on one side the cipher of the King, with the inscription, "Germany's first Iron Railroad, with steam power, 1835." ("Deutschlands erste Eisenbahn mit dampfkraft, 1835"); on the other side are the united arms of the two towns, with the inscription, "Nuremberg and Furth." After a short pause, the steam-carriages, with nine carriages for passengers attached to it, all decorated with the national colors, set out for Furth, while countless multitudes of spectators were assembled along the road. The carriages traversed the road three times and were always filled with passengers.—[German paper.]

At Ulm a Company has been formed to construct a Railroad from that city to Karsstadt, by Esslingen.—[German paper.]

CLIFTON SUSPENSION BRIDGE.

It has at length been determined by the trustees of the proposed suspension bridge across the Severn, at Clifton, to proceed with the undertaking. The design to be adopted is that of Mr. Brunel, with some new suggestions.

RAILROAD SUMMARY.

NEW RAILWAY.—According to the *Journal of Vienna*, an architect, whose name is Antonius Pius de Riget, has invented a new species of Railway, which possesses a great many advantages over those now in use or now laying down. The nature of the contrivance is not specified, but it is much boasted of. Though we have no faith in such announcements, the subject may be worth inquiring into by those who are engaged in laying down Railways.—[London Courier.]

LONDON AND GREENWICH RAILWAY.—Yesterday the engines and carriages of the London and Greenwich Railway Company were again tried in the presence of several scientific gentlemen from Cambridge and other places. Two trains were in readiness at an early hour, and performed the trip between High-street, Deptford, and the Spa-road, Bermondsey, a distance of upwards of two miles, in *four minutes*. The cause of the fall of the two unfinished arches at the extremity of the line in Bermondsey-street, was the removal of the shores by the contractor's workmen. The engineer, on discovering this impropriety, ordered them to be pulled down and rebuilt—the cost of which, about £58 will be borne by the contractor.—[London Courier.]

ANOTHER ADVANCE IN THE PRICE OF IRON.—It will be recollect that, in the beginning of December last, an advance of £1 per ton took place in the price of the manufactured iron; another advance of £1 per ton occurred on the 7th January; and we have now to state that a third advance of £1 per ton, on all descriptions of manufactured iron, took place on the 18th instant; making a total advance of £3 per ton, in the course of about six weeks. A meeting of the

Welsh iron masters took place on the 12th, at which it was unanimously agreed to advance the price of bar iron £2 per ton, making the total advance of £4 per ton since the 1st of September last.—[Birmingham Advertiser.]

RAILROAD STOCKS.

Liverpool and Manchester Rail-way, 100 220 0

London and Greenwich Rail-way,	20	29	10
London and Birmingham Rail-way,	45	110	0
Brighton Railway,	5	17	0
Great Western Railway,	5	20	10
London and Croydon Railway,	2	0	0
London and Blackwall Rail-way,	3	6	5
London and Gravesend,	1	0	0

iod of ten years, since the Erie Canal has been completed. How could this immense and increasing revenue be produced, but for *lateral canals*? These canals are considered by many as a burthen to the canal funds, when the reverse is the fact, and it is gratifying to find that the Comptroller is continuing to perfect his statistical information by tables, which will show the trade to and from all the important points and districts on our canals.

That the Black River Canal feeder (for this is the proper name) is *indispensable to supply the enlarged canal with water*, will pay to the State a full and liberal interest on its cost from lumber alone, no one can doubt when the singularly fact is noted, by the Comptroller's report of January, 1835.

That the total productions of the forest were, 344,863 tons

While all other articles of transpor-tation down, were,	208,962
Ditto up,	114,608
	323,570

Tons, 668,433

And this year's report of the Comptroller will show the increase of business in the produce from the *forest* arriving at the Hudson in 1835, to be 153,315 tons; the actual amount as far as ascertained by the Comptroller's table equals 498,178 tons! for the year 1835—[see table below]—an amount greater in *dead weight*, than was carried to, and exported from the port of New-York, by all the American and foreign vessels which entered at and cleared from that port during the year 1833. For proof see the official report of the Collector of New-York, and tables, Railroad Journal of the 10th January, 1835. ALBANY.

Table showing the increase of lumber in 1835 which arrived at the Hudson, compared with 1834.

1834.

Boards and Scantling,	107,747,900 feet	181,016 tons
Sq. timber, cubic feet,	1,440,515 "	28,810 "
Staves,	55,351,800 "	32,676 "
Shingles, M.	34,045 "	5,719 "
Wood, cords,	34,515 "	96,642 "

344,863

1835.

Boards and Scantling,	184,150,600 feet	306,917 tons
Sq. timber, cubic feet,	1,495,711 "	29,914 "
Staves,	99,549,100 "	49,774 "
Shingles, M.	51,261 "	8,568 "
Wood, cords,	36,791 "	103,045 "

Produce of the forest, 498,178 tons
Increase, 153,815 "

The following article from the Albany Argus gives a glowing yet true picture of the business of Oswego. The great advantages for business which Oswego possesses, are becoming more justly appreciated. It requires not the gift of prophecy to foretell with accuracy its destiny. It

Offices.	Ft. lumber.	M. shingles.	Ft. timber.	No. of Staves.	Tolls on Erie Canal.	Gains above expenses and repairs.
At Horse Heads	11,692,761	8,119	9,467	1,468,913		
Havana	3,951,832	8,039	91,401	415,304	\$25,000.57	
	15,624,593	17,139	100,869	1,883,207		
Deduct this sum from tolls produced on the Erie Canal being the amount charged by the Comptroller's Report to the general fund, as deficiency in this canal, and as a burthen on the Erie Canal.						
					23,841.29	\$1,168.28
Lumber on the Oswego Canal.						
Oswego	8,682,742	9	106,577	1,166,008		
Salina	11,336,444	290	242,232	791,031	28,623.08	
	20,019,186	299	348,806	1,957,939		
Deficiency of this canal per Comptroller's Report.						
				9,028.24	19,594.84	
Lumber on the Crooked Lake Canal.						
Pen Van	3,108,03	3,571	734,285	975,614		
Dresden	278,311	159	no return.	14,800	28,142.71	
	3,386,414	3,70	733,265	990,414		
Deficiency on this canal by Comptroller's Report to pay expenses, etc.						
				8,23.35	19,899.36	
					\$40,663.48	

Total amount, \$40,662.48 added to the tolls of the Erie Canal, on *lumber alone*, the greatest part of which, from its bulk would never have reached the Erie Canal, but for these lateral canals. To the above amount of tolls, may be added a larger sum, derived from flour, wheat and potash, exchanged for merchandise, &c.—the trade in which is promoted by facilities for transportation. Villages springing up at the terminations of these canals, as if by magic, whilst the city of New-York and the *River Counties* receive from these canals their millions of millions of lumber to supply the yearly increasing demand for this all important article. The amount of tolls to support so important a canal as the *Black River Canal Feeder*, should not be considered one moment, when it is taken into consideration

the immense forests of timber, iron ore, copperas and alum that it will float to market—to increase and add to the taxable wealth of the city and the State of New-York.

The Oswego Canal should be credited by the State, but omitted in the Comptroller's report, w.r.t. the immense amount of *cord wood* it floats free of toll to sustain and keep up the salt works at Syracuse and Salina.—They could not be profitably sustained without the Oswego Canal. When we view the actual nett toll paid into the canal fund from all our canals, we find it above one million of dollars, and is eleven per cent. left on the cost of the canals, and we add is produced by these canals and from tolls derived 9-10ths—from the soil and forests of our State, and this too, within the short pe-

will within ten years become, if not the second, at least the third city of the Empire State.

OSWEGO.

The following statistics of the trade and commerce of Oswego, are derived, as the reader will perceive, from the most authentic source. The results speak for themselves. They show, both in the extent of its trade and the rapidity of its substantial growth, that it is destined to be one of the largest of the great cities of the Lakes.

Statement of the principle items of business at Oswego, during the year 1835, through the Oswego Canal and Lake Ontario.

Received by way of the Canal.

Merchandise for the country about Lake Ontario, 5,997 tons

" " Upper Lakes, 4,041

— 10,038 tons

Salt for the country

about Lake Ontario, 55,593 bbls.

" " Upper Lakes, 82,020

— 137,613 bbls.

Water Lime, 5,231

Gypsum, 1,150 tons

Pig Iron, 19,972 lbs.

Received by way of the Lake.

Wheat from the Canada shore of Lake Ontario, 109,391 bushels.

" American shore, 239,990

" Upper Lakes, 275,362

— 624,733 bush.

Shipped by way of the Canal.

Wheat, 76,437 bushels

Flour, 137,959 bbls.

Axes, 6,049 bbls.

Wool, 62,473 lbs.

Barley, 12,894 bushels

Cheese, 733,479 lbs.

Butter and Lard, 711,823 lbs.

Pork, 1,403 bbls.

Red Cedar Posts, 78,271 pieces

Pig Iron, 495 tons

Whiskey, 2,431 casks

Boards & Scantling, 8,814,581 feet

Timber, 103,574 feet

Staves, 2,233,953 pieces

Ban and Ship Stuffs, 118,440 bushels

Tonnage of vessels owned at the port of Oswego—

In 1833 it was 1467 tons, 24 schrs.

1834 2745 39 "

1835 5000 60 " & 2 stmbts.

of 1833, including vessels now building, and ready to be launched, will considerably exceed 7000 tons, and the number of vessels to be about 85.

Report of transactions at the custom-house, at Oswego, from the 1st of April to the 1st of November, 1835.

American vessels entered from foreign countries, 20,871 tons

" ports of the U. S., 58,170

Foreign vessels entered from foreign ports, 63,298

Total amt. of tonnage entered, 153,249

American vessels cleared for ports of U. S., 62,021

do. foreign ports, 25,873

Foreign vessels cleared for foreign ports, 65,016

— 152,910

Total foreign and domestic entries and clearances, 306,159

Amount of duties collected, \$35,649 02

Comparative statement of the business in the principle articles at the port of Oswego, in years 1834 and 1835:

Received by the Canal at Oswego, for the country about Lake Ontario, in 1834, 4,197 tons merchandise; in 1835, 5,428 tons—increase, 1,231 or 27 per ct.;—in 1834, 44,822 bbls. salt; in 1835, 55,593 bbls.—increase, 10,774 or 24 per ct.

Received by the Canal at Oswego, for the Upper Lakes, in 1834, 871 tons merchandise; in 1835, 4,041 tons—increase, 3,170 or 500 per ct.;—in 1834, 61,604 bbls. salt; in 1835, 82,020 bbls.—increase, 20,418 or 33½ per ct.

Received by the Lakes, from the shores of Lake Ontario, in 1834, 241,760 bushels wheat; in 1835, 349,371 bushels—increase, 107,611 or 40 per ct.

Received by the Lakes from the Upper Lakes, in 1834, 219,868 bushels wheat; in 1835, 275,362 bushels—increase, 55,494 or 25 per ct.

Shipped by the Canal in 1834, very little wheat; in 1835, 76,437 bushels—increase, 76,437 bushels;—in 1834, 112,023 bbls. flour; in 1835, 137,859 bbls.—increase, 25,936 or 23 per ct.

Notwithstanding two mills of 10 runs of stones were burnt in the early part of the grinding season.

The population of the county of Oswego at the late census, was 38,245—being an increase in five years of 11,401, or about 45 per cent.; and within the same period the population of the village of Oswego has more than doubled, being at the present time nearly if not quite 6000.

From the Baltimore Gazette.

BALTIMORE AND OHIO RAILROAD.

The following preamble and resolutions passed in the first branch of the City Council yesterday with but one negative, plainly indicated the favor with which this great and important work, so necessary to the prosperity of this city, is viewed by the immediate representatives of the people of Baltimore—and will remove all doubt, if any were entertained, as to their willingness to respond to the desire of their constituents.—[Chron.]

CITY COUNCIL, First Branch, February 24th

Mr. Barnes submitted the following preamble and resolutions:

Whereas, The early completion of the Baltimore and Ohio Railroad to the waters of the Ohio is deemed essential to the prosperity of Baltimore, and a large number of property-holders having memorialized the Mayor and City Council for aid to said work, expressing their conviction of the necessity of prompt, liberal and energetic measures on the part of the city authorities in support of said road—and their willingness and desire that the faith of the city shall be pledged to prosecute it to completion—Therefore,

Resolved, by the Mayor and City Council

of Baltimore, That it is expedient that the Baltimore and Ohio Railroad be completed to the Ohio river as soon as practicable—and that the Mayor and City Council of Baltimore are willing to pledge the faith of the city to the accomplishment of this all-important object to any amount required by the property-holders within the city, [upon such conditions, and under such circumstances as may be deemed proper.]*

Resolved, That the Mayor be requested to forward a copy of the preceding preamble and resolution to each of the Senators and Delegates from this city.

The ayes and noes being called for, appeared as follows:

Ayes—Messrs. President, Monmonier, Fobey, Stanbury, Thomas, Yeates, Legrand, Harker, Seldenstricker, Barnes, Mattoon, Tensfield, Scott, Gardner, Fosbennet, Dryden, Russell, Coskerry, King, Wm. J. Cole, Ball, McKinnell.

Nay—Mr. Wm. H. Cole.

* The words in brackets were added, on motion of Mr. Harker.

We have selected from the following Report such portions as contain descriptions of the route and mode of construction—it being the first official publication of the Company.

TO THE STOCKHOLDERS OF THE WILMINGTON AND SUSQUEHANNA RAILROAD COMPANY.

This being the First Annual meeting of the Stockholders of this Company since its organization, the Directors, in compliance with the provisions of the charter, present to you a statement of their proceedings up to the present time.

The unity of design and of interest which exists between the Wilmington and Susquehanna Railroad Company, and the Delaware and Maryland Railroad Company, renders it necessary for the purpose of a complete understanding of the object of this report, that they should be treated here as being, in fact, one and the same Company.

The two Companies were organized by the election of their Directors and Officers in April last. No time was lost in the selection of a competent Engineer and Assistants; and in the final location of the route from Wilmington to Charlestown, in the State of Maryland. In the month of June the contracts were made for grading the road and for the construction of the bridges and culverts. In the beginning of July, the contractors commenced operations along the whole line, and have proceeded with great industry and despatch, and without intermission, except in relation to the masonry, which has necessarily been suspended by the approach of winter.

The ground upon which the location is made, is eminently favorable for the purpose of a Railroad. The greater portion of it is so nearly in a straight line, that the few curves in it are scarcely perceptible.—Excepting that which occurs at the departure from Wilmington, which has a radius of 1500 feet and two others of 2000 feet each, there is not a curve on the whole road, which has a less radius than one mile. A great portion of it also is an em-

tire level; the highest grade, which is in Maryland, between the Little Elk and North East, and which is but a short distance in an ascending and descending line, does not exceed thirty five feet in the mile. The character of the soil or earth has likewise proved highly favorable: no quick sands have been encountered and but a small quantity of rock at one point of the road.

During the six months in which the work has been proceeding, nearly two-thirds of the excavation from Wilmington to the line of the State of Maryland, has been completed; and more than one-half of that from the Maryland line to Charlestown. The whole amount of excavation in the State of Delaware is 630,000 cubic yards, of which about 400,000 yards have been done. The whole amount in Maryland to Charlestown, is about 950,000 cubic yards, of which about 500,000 yards have been done.

It was determined by the Directors at an early period, that the bridges and culverts between Wilmington and the waters of the Susquehanna, should be constructed of solid masonry; that being a part of the continuous route from Philadelphia to Baltimore, where in case of any disaster occurring to a bridge, no aid could be derived from steam-boats while the necessary repairs were making. Upon this consideration, it was unanimously resolved by the Directors, to encounter the expense of constructing timber-bridges of such permanent and durable materials, as would secure them, so far as human prudence could do, against the possibility of such contingencies. The greater number of the culverts have been completed along the whole route, with the exception of the coping. All the bridges, except that over the White Clay Creek, which has not yet been commenced, are far advanced towards completion.

With a view to the important object of a continuous line of Railroad from the city of Philadelphia to Baltimore, the Directors early in the last summer, opened a correspondence with the Directors of the Baltimore and Port Deposit Railroad Company, for the purpose of obtaining a definite understanding as to the intentions of that Company in relation to the location of their road; and having received official information from them, that their road would be brought to the Susquehanna at Havre de Grace, the Directors thereupon resolved to extend this road from the termination of its first location near Charlestown, to the Susquehanna Ferry opposite Havre de Grace, and thus connect it with the Baltimore and Port Deposit Railroad. They accordingly directed a survey of the route from the Charlestown Post road to the Susquehanna Ferry, which was completed in the month of September, and the location fixed at a grade which nowhere exceeds twenty-four feet in the mile. This extended portion of the road, which is 5 1/2 miles in length, has been divided into three sections which have been let for grading and masonry, to contractors, of whom the Directors can speak from former experience, as fully competent to perform the work judiciously. The contractors have commenced the work on one of the sections, and the Directors en-

ertain a confident belief that the whole work will be completed in time to lay down the rails by the month of August next.—The communication across the Susquehanna will be secured by adequate structures on each bank of the river, and a steam ferry boat so constructed as to render the passage perfectly and easily practicable in winter as well as summer. The expense of these structures and facilities will be equally divided between the companies on each side of the river. This extension of the road will, of course, add a considerable item to the original estimate of the cost of their undertaking, but that additional expense will be more than justified by the great importance and value of the object which is to be gained.

Looking to the same important object of an unbroken line of Railroad communication between Philadelphia and Baltimore, the Directors have caused surveys to be made from the depot in Wilmington to the line of the State of Pennsylvania, where it is proposed to form a junction with the Philadelphia and Delaware county Railroad; and they are gratified to have it in their power to state, that a very favorable line has been fixed upon between these two points. The highest grade on the route will not be more than twelve feet in the mile, and with the exception of the curve out of Wilmington, there will be none with a less radius than a mile. The route from Philadelphia to our State line has been surveyed, and a location fixed upon of easy execution. The Directors are now awaiting the action and co-operation of the Pennsylvania Company, which, it is understood, are only delayed by an application now pending before the Legislature of that State, for certain amendments to their charter.

A contract was made in July last with Messrs. A & G Ralston, of Philadelphia, for two thousand tons of iron-bridge rail, the whole of it to be delivered in Wilmington by the month of May next. The contract was secured in England, previously to the great rise which the extraordinary demand for that material has lately produced in that country. A contract has also been made on favorable terms, for a supply of all the cross sills or sleepers required for the road. These are to be of red cedar and yellow locust, and are to be delivered at proper points designated along the route in the course of next spring. Contracts have also been made for the construction of four locomotive engines—viz: three from Mr. M. W. Baldwin's manufactory in Philadelphia, and one from Bury's manufactory in England. These engines are to be of the best construction, and ready for operation in August next. Arrangements are made for obtaining, in the season, a suitable number of passenger cars; a branch of business which, as the manufacture of locomotive engines, the Directors anticipate will be advantageously established and prosecuted in Wilmington. A careful examination by a committee of the board, on the various Railroads from Washington to Lowell, has been made, and such information obtained as will enable the Directors to make

a judicious selection in reference to comfort, safety and convenience, on this point.

The report of the Treasurer of the Wilmington and Susquehanna Railroad Company now submitted to you will show the details of receipts and disbursements, in this company since its organization. The capital stock authorized by the charter is \$400,000: of this sum \$240,000 have been called in, and \$167,027 14 have been disbursed. The capital stock of the Delaware and Maryland Railroad Company is also \$400,000; of which \$200,000 have been called in, and \$143,287 04 have been disbursed.

The Directors take pleasure in acknowledging the services of their Chief Engineer, William Strickland, Esq., whose reputation is too well established throughout the country, to require a commendation from them; of his Assistant, Mr. John C. Frautwine, and of his superintendent of construction, Mr. James P. Stabler, to whom the immediate supervision of the work has been confided. The subordinate officers engaged in the superintendence of the work, are also fully entitled to the approbation of the Directors.

In closing this report, the Directors deem it pertinent to refer to those circumstances in the character and position of this road, which hold forth the promise, nay, certainty, of speedy profit to the stockholders and benefit to the community. In liberality and solidity of construction, it will not be surpassed by any other Railroad in the Union. Every care has been taken to render it solid and permanent, and to place its future operations beyond the reach of accident or contingency. Its position being on the great thoroughfare of the country, lying almost in a straight line between Philadelphia and Baltimore—being the shortest route, and occupying the most favorable ground that can be possibly selected, it must, as a link of the great chain of national Railroad running north and south, receive a full and liberal share of the travel and business on that great channel of internal intercourse. Looking either to the north or the south, and to the increase an extension of the facilities of travel and transportation, by Railroads and Canals, all will be seen to have a common destination, through Philadelphia on the one side and Baltimore on the other, to this as a central and inevitable point. Philadelphia will soon be connected with the eastern extreme of the Union and with the Lakes on the north, by an unbroken chain of Railroads and Canals. Baltimore is connecting herself with the west and the south by the same means. Situated at the head of commerce on the Chesapeake Bay, all the great thoroughfares of the south and the west, centre in that city. The Baltimore and Ohio Railroad, now completed to Harper's Ferry on the Potomac, with one branch to Frederick and another to Washington, already draws within its sphere the great mass of southern and southwestern travel. A Railroad from New-Orleans to Nashville in Tennessee, is in progress; its connection with Baltimore, through the valley of Virginia, crossing the contemplated Railway from

Charleston to Cincinnati, and intersecting the Baltimore and Ohio Railway at Harper's Ferry, may confidently be anticipated. When these splendid undertakings shall be realized, who can overlook or set limits to the value and importance of this, the only available link in the great chain of intercourse between Baltimore and Philadelphia?

In behalf of the Directors,

JAMES CANBY, President.

Wilmington and Susquehanna Railroad Office, Jan. 11, 1836.

REPORT OF THE SANDY AND BEAVER CANAL

To the President and Directors of the Sandy and Beaver Canal Co.

Gentlemen:—In compliance with your request I have the honor to lay before you the following report of the present state of the work under my direction.—

During the past summer the whole line has been minutely traced, with a view to a permanent location; by this survey the total extent of Canal has been reduced three miles, or the distance from the Ohio river at the mouth of Little Beaver creek to the western termination at the Ohio Canal, by the recent examination and location will not exceed $73\frac{1}{2}$ miles.

The Eastern division of the Canal, extending from the Ohio river to a point two miles west of New Lisbon, embraces a distance of about 27 miles, of which 17 miles are "slackwater;" for this description of improvement the stream is exceedingly well adapted, the valley being narrow and the banks bold and prominent affording numerous and eligible sites for the locks and dams, and an abundance of good materials for their formation.

The summit or Middle division is about 14½ miles in extent, and the Western division, terminating at the Ohio Canal, about 32 miles. The latter division extends through a country affording the greatest facilities for constructing a cheap and permanent improvement; the valley of the creek is broad and has nearly a uniform declivity from its source to its confluence with the Tuscarawas. On the Eastern division the lockage is 464 feet, and on the Western 205, constituting in all 669 feet. In locating the Western division the level has been kept up from Williams' mill dam to the debouch into the Ohio Canal at the flourishing town of Boliver, by which arrangement an excellent water power is secured to the company, affording a head and fall of 26 feet; the owners of the property at the site selected for using the water have liberally ceded to the Company 10 acres of very valuable land for that purpose. Sandy Creek at that point will yield a sufficiency of water, independent of the requisite supply for the Canal, *at all times to work 20, and for eight months in the year 50 pair of mill-stones.* This power may reasonably be estimated as worth \$6000 per annum. Many other valuable sites for hydraulic purposes have been created or purchased along the route, which in conjunction with the one above mentioned, will probably afford the Company a revenue of \$7000 per year.

On the eastern division of the line, 49 sections, or $24\frac{1}{2}$ miles of canal, 13 dams

and 46 locks, are now under contract: on the Middle division, 21 sections, or 11 miles, including the tunnels and the reservoir mounds on the west fork of Little Beaver Creek, and Cold Run: and on the Western division 28 sections or 14 miles, 11 locks, 1 dam, and the aqueduct over the Tuscarawas river, constituting in all 49½ miles of Canal, 14 dams, 57 locks, one aqueduct, and two reservoir mounds now under contract.

The work has been prosecuted in most cases with energy, and is now in a greater state of forwardness than could reasonably have been anticipated, considering that the season was far advanced when it was commenced. About thirty four sections or 17 miles of Canal are now completed, and likewise the mason work of two locks, and 144,000 cubic yards of excavation removed from the summit deep cuts: dam No. 2, on the Western division will probably be completed next week.

The foundation of five other locks and two dams are laid, and 1500 perches of wall built; and a large quantity of stones and other materials for the construction of locks and dams are prepared and on the ground; and I have no doubt all the work now under contract, excepting the tunnels and aqueduct, will be furnished in the approaching year.

The work placed under contract is in most instances in the hands of responsible and efficient men, and has been taken on terms exceedingly favorable to the Company. There is at the present period on the line a force equivalent to 2160 men. The cost of the locks, which are built in the most durable manner of cut sandstone, will not exceed \$700 per foot lift, being about 30 per cent below the ordinary cost elsewhere. The cost of the dams, which are in most instances 14 feet high will average about \$28 per foot linear across the stream; and the Canal, exclusive of locks and dams, generally from \$3000 to \$5000 per mile.

A contract has been entered into for furnishing the remainder of the hydraulic cement; it is found in abundance contiguous to the line; the quality is equal to any I have seen, and the cost extremely moderate.

The contract for excavating the tunnel and approaches, has been taken by energetic and persevering contractors on reasonable terms, the former not exceeding the estimated cost: this work is to be completed by May 1837. As much has been stated in relation to the adequacy of the supply of water on the summit, it may be proper to remark, that during the past season I commenced and have continued a series of minute examinations of the most prominent streams relied on for a supply: those examinations have thus far fully corroborated the truth of the statements and calculations embraced in the report made you last autumn by Mr Hodge and myself. I feel fully satisfied, that with the aid of the reservoirs that can be constructed on the summit, at a moderate cost compared with their utility, a much larger quantity of water may be introduced into the summit and its dependent levels, than will be

requisite for the transit of the immense trade that is destined to seek a market through its channel. The reservoirs now under contract will contain as follows: West Fork reservoir, 130,000,000 of cubic feet; area, 350 acres; Cold Run reservoir, 88,000,000 of cubic feet; area, 250 acres; in addition to which it is proposed to elevate the banks of the canal so as to retain one foot in depth of available water, and flood several pieces of low ground on its northern or upper side, amounting in all to about 150 acres, which, when full, will furnish about 6,500,000 of cubic feet, making in the aggregate from these sources alone, an available supply of 224,500,000 cubic feet of water, a demand on which may be requisite in a dry season for a period of 100 days. By calculation it will be perceived, these reservoirs will afford for that period 2,245,000 cubic feet of water per day, equivalent to a discharge of 1559 cubic feet per minute. If to this sum is added the minimum natural flow of water on the summit as reported to you last autumn, (558 cubic feet per minute,) it will be observed that the flow of available water in a dry period will amount to 2117 cubic feet per minute, or sufficient, after deducting all that the nature of the soil and climate will require for leakage, filtration and evaporation, for the passage of 185 boats per day. The West Fork and Cold Run reservoirs are about one mile apart: when filled, the surface of the water in each will occupy the same plane, or be elevated to the same height: it is designed to have a feeder extending from one to the other, so that the surplus water in one can be admitted into the other, if required. A large waste weir is to be constructed on this feeder for the purpose of discharging the waste water when both reservoirs are full. This water when thus discharged, is conducted into the reservoir on the summit level. The two first mentioned reservoirs will receive the drainings of 24 square miles of country; the summit, the drainage of 80 square miles. The usual depth of the rain that falls in this section of the country can, I am informed, with safety be presumed at 36 inches per annum, or equal to a column of that height, being 83,635,000 cubic feet on a square mile, and on 24 square miles 2,107,244,800 cubic feet annually. From experiments made on a large scale elsewhere for practical purposes it has been ascertained conclusively, that 75 per cent, of the rain that falls can be laid up in reservoirs. From this data it will be observed, that the three reservoirs above alluded to may be filled seven times per year. This exhibit will probably satisfy the most sceptical as to the adequacy of the supply of water. As to the immensity of the trade that will wend its way through the Sandy and Beaver canal to an eastern market, I believe there has never been surmised a doubt: a glance at the map will prove conclusively that a very large portion of the produce of Michigan, Illinois, Indiana, Kentucky and Ohio, which are rapidly increasing in population and wealth, must be wafted through it. The business of that section of the country is now to a great extent accom-

modated by the New-York improvement, but the completion of the Sandy and Beaver Canal will secure to it a safer transit to and from the seaboard, much shorter, and *navigable six weeks earlier in the spring, and three later in the fall* than the one now traversed, being sufficient inducements to secure it. What the extent of that trade will be time alone can develop. On the Erie and Chippewa canals, a very large portion of the business done on the first of which is derived from the country above mentioned, there have been received in tolls in 1829, \$759,055, 1830, \$1,032,476, 1831, \$1,194,619, 1832, \$1,196,008, 1833, \$1,324,421, 1834, \$1,292,955, and there is no doubt that the business of this year will very greatly exceed the last. On the Ohio canal there was collected in 1832, \$32,867, 1833, \$136,920, 1834, \$151,257, and the amount of tolls received the present year at some of the collectors' offices exhibits an increase of forty-five per cent, over the last.

When the Canal or Railroad authorised by an act of the Legislature of this State at the last session, to be constructed from the western termination of the Sandy and Beaver canal to the Miami canal near the mouth of the Auglaize river, shall have been completed, it must add an immense revenue to your work, as it, in connexion with the Wabash and Erie canal through Indiana, and the contemplated Railroad through Illinois to the Mississippi river, will constitute a continuous chain of Internal Improvement, extending westward from the Sandy and Beaver canal 500 miles, and from Philadelphia 1000, into the rich and fertile regions of the west.

The following synopsis of the distance the trade of the country situated west and south-west of the Sandy and Beaver canal would have to travel from the western termination of that work, in order to reach a market by the various routes now afforded it, or about to be, will fully justify the conclusion that it must seek a passage through it.

Distance, by the Ohio Canal, Lake Erie, New-York Canal and Hudson River, to New-York.

From the Sandy and Beaver
Canal to Cleveland, 80 miles.
From Cleveland to Buffalo, 200 "
From Buffalo to New-York, 515 "

Total, 795 miles

Distance, by the Ohio and Monongahela Canals, and Pennsylvania Canal and Railroad, to Philadelphia.

From Bolivar to Akron, 42 miles.
From Akron to Beaverstown, 114 "
From Beaverstown to Pittsburg, 28 "
From Pittsburg to Philadelphia, 394 "

Total, 578 miles

Distance, by the Sandy and Beaver Canal and Pennsylvania Improvements, to Philadelphia.

From Bolivar to Beaverstown, 87½ miles.
From Beaverstown to Pittsburg, 28 "
From Pittsburg to Philadelphia, 394 "

Total, 509½ miles.

From the rapid increase in business on the New-York and Ohio Canals, it is to be presumed that when the Sandy and Beaver Canals shall have been finished, the tolls on the Ohio canal will at least amount to \$100,000 per annum; and from the foregoing facts and statements it is to be inferred, that two-thirds of that trade will pass through the Sandy and Beaver Canal, which would net the holders of stock in that work, at the rate charged on the Ohio Canal, an income of at least \$30,000 the first season.* If to this sum is added the amount that may be anticipated from the liberal grant contained in the intended charter,† which cannot fall short of \$150,000, the Company will receive, in the first year after the work is finished, \$210,000 in tolls—indpendent from the large business that may be expected of the country west and northwest of the termination of their work—presenting the novel result of a canal yielding seventeen per cent, on its entire cost the first year after its completion.

All which is respectfully submitted.

E. H. GILL, Chief Engineer.

S. and B. Canal Co.

* This estimate may seem large, but it must be kept in mind that the Sandy and Beaver Canal will constitute a connecting link between two large and important works, (the Ohio canal and Pennsylvania improvements) now completed; consequently it has not, like other canals, to await the growth of business.

† The intended charter secures to the Sandy and Beaver Canal Company all the tolls collected on the Ohio Canal from boats that have passed through the Sandy and Beaver canal for seven years after its completion.

BUCKWHEAT STRAW.

In answer to a question put to us some time since, by a young Farmer, whether "any use could be made of his buckwheat straw," we replied that it was better for his milch cows than the best timothy hay, that his cows would eat it with equal avidity; that if it had not been too long exposed to the vicissitudes of the weather, it would prove equally nutritious; that so far as the secretion of milk was concerned, it was infinitely preferable to any hay or fodder within our knowledge, and that if cut and boiled, it would make most excellent slop for his cows. In a conversation with a gentleman from Virginia a few days since, we were happy to find our own opinion and experience confirmed by an anecdote which he related. At the time of threshing out his buckwheat, he was from home, and contrary to his usual practice, which was to cast the straw into the barn-yard amongst the other litter, his hands stacked it in a fold-yard, with his other hay and fodder, where it was accessible to a portion of his cattle. On his return home, he found that his stock had made as free use of the buckwheat straw, as with either his hay or fodder, thus establishing the fact that these animals, which should be admitted to be judges of what suits their own appetites, when left to their own choice, had by their

selection of this hitherto neglected food, pointed out a new source of economy to the farmer and planter, which too many have not properly appreciated. Buckwheat as every one knows, can be grown upon almost any soil if planted from the opening of July, and will not only yield a handsome return of grain, but a full and wholesome supply of as good hay as any agriculturist ever fed his cattle withal.

"Adversity," to use a trite adage, "is the mother of invention," so should the experience of the last few years teach every one engaged in tilling the earth, to husband every means within his power, and of resorting to every resource within the compass of his ability, to make his stock comfortable, and keep them in plentiful supply of food during the inclement months of winter. It is the custom of most farmers to sow buckwheat on the poorest spot on the farm, and even when thus treated, often without manure, with no other culture than a ploughing and harrowing, its product is from 20 to 30 bushels to the acre, according to the season. When placed under more advantageous circumstances, on good soil, or land properly manured, it has been known to give a produce of from 60 to 70 bushels to the acre. If then, in stead of sowing a small patch merely, to afford meal enough for the winter supply of those delightful cakes, which add so much to the luxury of the farmer's winter breakfast table, were to sow from 10 to 20 acres, how much of profit would ensure to him? how much wholesome food would he secure for his cows? and how much solid comfort to all and every thing around him? Then buckwheat grain, nothing is eaten more readily by the poultry and the pigs. For the former, it is the best in winter, largely contributing by the great proportion of lime of which it is composed, to make them lay; for the latter, or for breeding sows, if reduced to meal and boiled into slop, it is at once nourishing and fattening. For sows with young pigs, nothing is more conducive to the secretion of plentiful supplies of milk. And should the straw be cut and steamed, and thus given to milch cows, it would serve as a substitute for other slops, and would materially increase the quantity as well as quality of their milk.

Besides the above uses of this article, if sown early, in the proportion of 2 bushels to the acre, it would bear mowing twice during the season, and would afford most excellent grass for soiling: and beyond all question, there is no green crop that can be turned in with the exception of a clover-ley, that makes so good a dressing for ground for wheat as does buckwheat.

When sown for the grain, from 1 to 1½ bushels to the acre is enough seed.

From the 1st of May to the 31st of December, 1836, 730,000 passengers were conveyed on the railroad from Antwerp to Brussels; the receipts amounted to 734,236f.

Pig iron has been reduced by the iron works in the neighbourhood of Bradford, £1 a ton. A similar reduction has taken place in Wales.—[Times.]